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THE *Fats and Oils* SITUATION

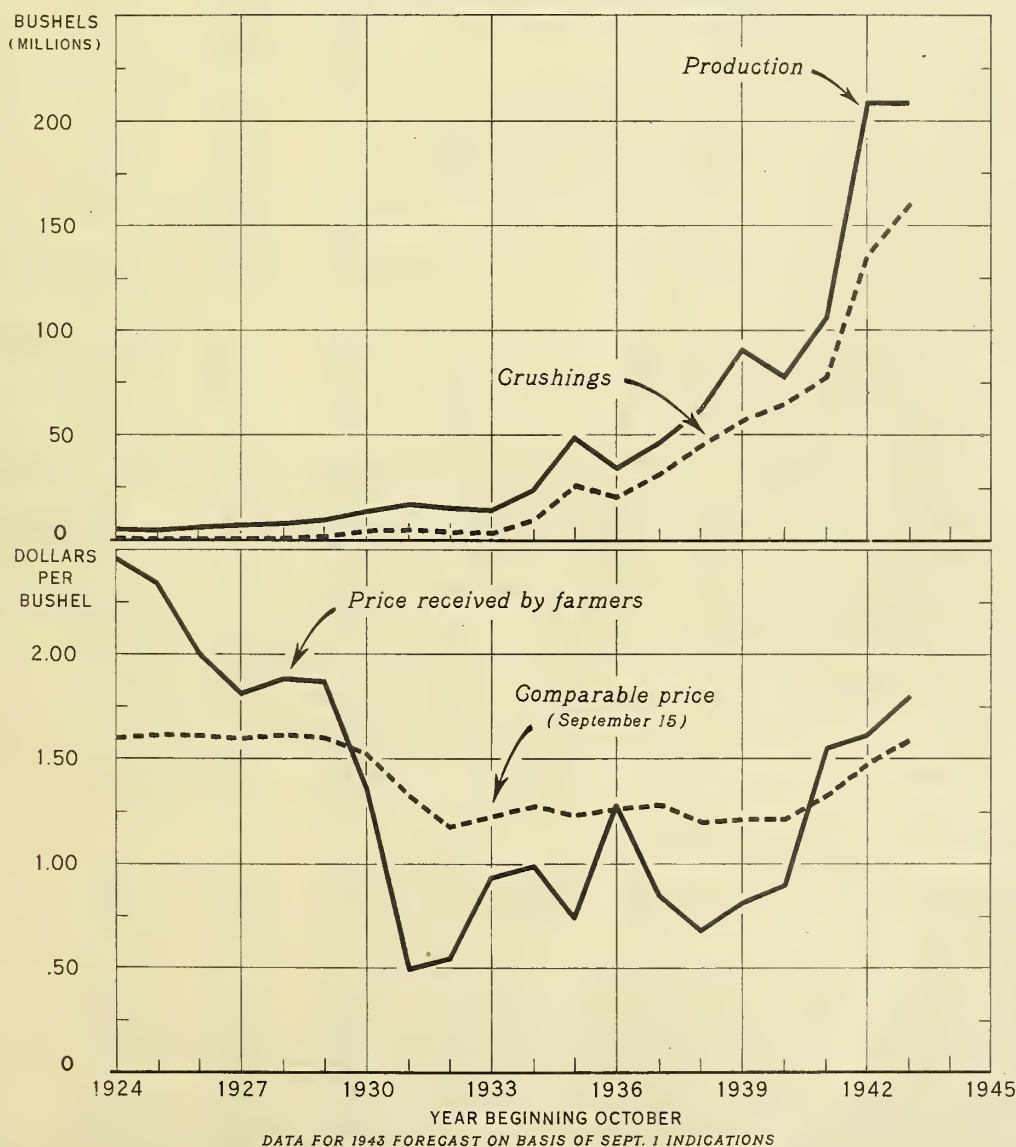
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

FOS-80

BAE

OCTOBER 1943

SOYBEANS HARVESTED FOR BEANS: PRODUCTION, CRUSHINGS, AND PRICE, UNITED STATES, 1924-43



U. S. DEPARTMENT OF AGRICULTURE

NEG. 43291

BUREAU OF AGRICULTURAL ECONOMICS

Soybean crushings continue to mount and may produce about 1,400,000,000 pounds of oil and 3,750,000 tons of cake and meal in 1943-44. In addition, some soybeans will be used for seed, fed to livestock, used for full-fat flour, and exported. Soybean prices are being supported at the highest level since 1929, when most soybeans produced were used for seed.

Table 1.- Wholesale price per pound of fats and oils at specified markets, and index numbers of prices, September 1941 and 1942, July-September 1943

Item	PRICES				
	September		1943		
	1941	1942	July	August	September
	Cents	Cents	Cents	Cents	Cents
Butter, 92-score, Chicago	1/36.6	1/43.2	41.8	41.8	41.8
Butter, 92-score, New York	1/36.9	1/43.9	42.5	42.5	42.5
Oleomargarine, dom. veg., Chicago	16.5	19.0	19.0	19.0	19.0
Compounds (animal and veg. cooking fats), Chicago	15.9	17.0	17.0	17.0	17.0
Lard, loose, Chicago	10.6	11.9	12.8	12.8	12.8
Lard, prime steam, tierces, Chicago	10.7	12.9	13.8	13.8	13.8
Lard, refined, cartons, Chicago	12.4	14.5	15.6	15.6	15.6
Oleo oil, No. 1, barrels, New York	11.8	13.2	13.8	13.8	13.8
Oleostearine, bbl., N. Y.	9.8	10.5	10.5	10.5	10.5
Tallow, edible, Chicago	9.0	9.9	9.9	9.9	9.9
Corn oil, crude, tanks, f.o.b. mills	12.4	12.8	12.8	12.8	12.8
Corn oil, refined, bbl., N. Y.	15.6	15.5	15.5	15.5	15.5
Cottonseed oil, crude, tanks, f.o.b. S.E. mills	12.2	12.8	12.8	12.8	12.8
Cottonseed oil, p.s.y., tank cars, N. Y.	13.6	13.6	14.0	14.0	14.0
Peanut oil, crude, tanks, f.o.b. mills	12.7	13.0	13.0	13.0	13.0
Peanut oil, dom., refined, drums, N. Y.	15.8	17.0	16.5	16.5	16.5
Soybean oil, crude, tank cars, midwestern mills	10.5	11.7	11.8	11.8	11.8
Soybean oil, edible, drums, l.c.l., N. Y.	13.9	---	15.0	15.0	15.0
Coconut oil, Manila, crude, tanks, f.o.b. Pacific Coast 2/	9.6	11.0	11.0	11.0	11.0
Coconut oil, Manila, crude, bulk, c.i.f. N. Y. 2/	3/10.5	11.4	11.4	11.4	11.4
Coconut oil, Manila, refined, edible, tank cars, f.o.b. N.Y. 2/4/	---	12.8	12.8	12.8	12.8
Olive oil, edible, drums, N. Y.	71.7	56.7	71.5	71.5	71.5
Olive oil, inedible, drums, N. Y.	52.3	51.7	55.3	55.3	55.3
Olive-oil foots, prime, drums, N. Y.	17.0	19.0	---	---	---
Palm oil, Niger, crude, drums, N. Y. 2/	11.2	12.1	12.1	12.1	12.1
Rape oil, refined, denatured, bulk, c.i.f., N. Y.	4/15.6	4/16.0	16.0	16.0	16.0
Sunflower oil, tank cars, f.o.b. N. Y.	---	14.3	14.3	14.3	14.3
Tallow, No. 1, inedible, Chicago	8.5	8.4	8.4	8.4	8.4
Grease, A White, Chicago	8.6	8.8	8.8	8.8	8.8
Menhaden oil, crude, tanks, f.o.b. Baltimore	7.8	8.8	8.9	8.9	8.9
Sardine oil, crude, tanks, Pacific Coast	8.0	8.9	8.9	8.9	8.9
Whale oil, refined, bleached winter, drums, N. Y.	11.0	11.1	12.3	12.3	12.3
Linseed oil, raw, tank cars, Minneapolis	10.3	12.2	14.4	14.4	14.5
Linseed oil, raw, drums, carlots, N. Y.	5/11.0	5/13.0	15.3	15.3	15.3
Perilla oil, crude, drums, N. Y.	22.6	24.5	24.5	24.5	24.5
Oiticica oil, drums, N. Y.	22.2	25.0	25.0	25.0	25.0
Tung oil, drums, N. Y.	35.5	39.0	39.0	39.0	39.0
Castor oil, No. 3, bbl., N. Y.	11.8	13.8	13.8	13.8	13.8
Castor oil, No. 1, tanks, N. Y.	11.0	13.0	13.0	13.0	13.0
Castor oil, dehydrated, drums, carlots, N. Y.	16.5	18.6	18.6	18.6	18.6
Cod-liver oil, med. U.S.P. bbl., N. Y.	38.0	36.4	36.5	36.5	36.5
Cod oil, Newfoundland, drums, N. Y.	10.5	12.0	12.0	12.0	12.0
INDEX NUMBERS (1924-29 = 100)					
Eight domestic fats and oils (1910-14 = 100)	124	143	142	142	142
Eight domestic fats and oils	83	101	101	101	101
All fats and oils (27 items)	96	107	108	108	108
Grouped by origin:					
Animal fats	84	99	96	96	96
Marine animal oils	117	127	132	132	132
Vegetable oils, domestic	122	126	132	132	132
Vegetable oils, foreign	142	145	157	157	157
Grouped by use:					
Butter	83	98	93	93	93
Butter, seasonally adjusted	82	97	101	96	92
Lard	82	98	105	105	105
Other food fats	135	132	139	139	139
All food fats	92	104	103	103	103
Soap fats	116	119	120	120	120
Drying oils	116	134	150	150	150
Miscellaneous oils	103	117	117	117	117
All industrial fats and oils	115	125	132	132	132

Prices compiled from Oil, Paint and Drug Reporter, The National Provisioner, The Journal of Commerce (New York), and reports of the Food Distribution Administration and Bureau of Labor Statistics. Prices quoted include excise taxes and duties where applicable. Index numbers for earlier years beginning 1910 are given in Technical Bulletin No. 737 (1940) and The Fats and Oils Situation beginning December 1940.

1/ Reflects open market sales only. Current figures refer to all types of wholesale trading for cash or short-time credit. 2/ Three-cent processing tax added to price as originally quoted. 3/ Tanks, N. Y. 4/ Quoted in drums.

5/ Converted to present basis of quotation.

 THE FATS AND OILS SITUATION

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Summary

Total production of fats and oils from domestic materials in 1943-44 is now expected to be in the neighborhood of 11.5 billion pounds compared with 10.6 billion pounds a year earlier (nearly 11 billion pounds in calendar 1943) and 9.5 billion pounds 2 years earlier. On the basis of October 1 indications, 1943 flaxseed production will be 51.5 million bushels compared with the 54.7 million bushels expected a month earlier. Minor reductions also occurred in the indicated 1943 production of soybeans, peanuts and cottonseed. In terms of oil output these reductions from the prospects of a month ago amount to more than 100 million pounds.

Improvement in ocean shipping conditions may permit an increase in imports of oils and oil-bearing materials from South America, West Africa, the South Pacific, and Ceylon in 1944. On the other hand, exports of fats and oils to our Allies and to European areas under Allied control also are likely to expand. Despite increased production in North America, world supplies of fats outside the Japanese-controlled area are still substantially under the pre-war level.

The order limiting manufacturers' use of fats and oils was amended in early October, principally by changing the permitted use of fats in civilian soap from 80 percent of base-period use to 90 percent for household soaps, 110 percent for commercial bulk package soap, and 150 percent for mechanics' soap. The new soap quotas if continued will involve the use of about 500 million pounds of lard in soap in the next 12 months. The permitted use of oils and fats for civilian paints and related products was raised from 50 to 60 percent of base-period use.

Production of inedible tallow and greases may not be greatly different in 1944 than in 1943. The number of cattle slaughtered probably will be larger next year than this, but average weights are likely to be less. Hog slaughter will be very large next winter and spring. However, with a smaller spring pig crop expected, hog slaughter (and grease production) probably will be reduced beginning in the fall of 1944.

Under a recent Government order, the 1943 crop of soybeans may be crushed only by mills having contracts with Commodity Credit Corporation. Soybeans must be purchased at previously announced support prices. To protect crushers, the Corporation when requested will purchase oil and meal from contracting mills at prices slightly under ceilings.

-- October 21, 1943

OUTLOOK

BACKGROUND.- With the entrance of the United States into the war in December 1941 and the subsequent loss of most of our imports from the Far East, the fats situation was transformed from one of comparative abundance to one of critical supply. Production of domestic oil crops was encouraged in 1942. The total output of fats and oils in the 1942 crop year was about 10 percent greater than in the previous year. Both domestic and export demands for fats also mounted and measures were taken to control prices and distribution. Production was further encouraged in 1943.

Fats and Oils Supply to Increase in 1943-44;
Requirements Also Likely to Expand

Both domestic and imported supplies of fats are expected to increase in 1943-44. On the basis of the latest crop indications and probable live-stock slaughter, production of fats and oils from domestic materials in 1943-44 seems likely to amount to about 11.5 billion pounds, 0.9 billion pounds more than in 1942-43. With a favorable outlook for an improved ocean shipping situation, some increase in imports also seems probable. Exportable surpluses in South America, Africa, the South Pacific, and Ceylon, which have been partly unavailable because shipping space could not be found to carry them, probably will be drawn upon to an increased extent in 1943-44.

Export requirements for fats and oils are expected to show a further increase. As indicated in The Fats and Oils Situation for September, the food fat supply in continental Europe in 1944 may total only 6 to 7 billion pounds compared with a pre-war level of approximately 12.5 billion pounds. When the war in Europe is terminated, a substantial quantity of imported fats will be needed. Part of this probably can be obtained from Argentina and other surplus-producing areas, but for a year or 2 the demand for imports from the United States will be comparatively large. Resumption of whaling activities on a large scale would help relieve the European fat shortage, but this cannot be accomplished before the 1944-45 season and may not be achieved before 1945-46.

RECENT DEVELOPMENTS

Oilseed Crop Prospects Deteriorate in September

As a result of less favorable crop prospects indicated on October 1 than a month earlier, the probable output of oil in 1943-44 from cottonseed, peanuts, soybeans, and flaxseed is more than 100 million pounds less than expected a month ago. Total production of fats and oils from domestic materials in 1943-44 is now expected to be in the neighborhood of 11.5 billion pounds.

The flaxseed crop is now estimated at 51,486,000 bushels, 6 percent less than a month earlier. The prospective yield per harvested acre this year is 8.8 bushels compared with 9.2 bushels in 1942. The indicated soybean production of 206,868,000 bushels is down slightly from last month. Farmers' intentions on August 1 to harvest about 11.5 million acres for beans are not likely to be realized. A large acreage intended for beans in States outside the Corn Belt has been cut for hay because of drought damage and a need to supplement other hay crops.

Largely because of unfavorable weather in Oklahoma, indicated peanut production shows a slight reduction from a month earlier to 2,769 million pounds. The estimated 1943 crop by areas, compared with last year, is as follows: Virginia-Carolina area, 494 million pounds, down 4 percent; Southeastern area, 1,665 million pounds, up 53 percent; Southwestern area, 610 million pounds, up 1 percent. Prospective total production in the United States is

25 percent over 1942 production. Cotton prospects also declined slightly in September. In terms of cottonseed, the reduction amounted to about 90,000 tons. The total output of cottonseed is now expected to be about 5.1 million tons compared with an output of 5.7 million tons last year.

Production and Stocks of Fats and Oils
Decline in August

Factory production of fats and oils in August totaled 738 million pounds, 13 million pounds less than in July. Output of vegetable oils rose 38 million pounds, largely as a result of seasonal increases in cottonseed and linseed oil production. With cotton picking beginning early this year, August production of cottonseed oil was 40 million pounds compared with 28 million pounds last year. Animal-fat production (including marine animal oils) was 51 million pounds less in August than in July. The output of fish oil increased seasonally about 10 million pounds, but creamery butter and inspected lard production declined 29 and 35 million pounds, respectively. Production of creamery butter in August was about 10 percent smaller than a year earlier.

Stocks of primary fats and oils in warehouses and factories declined 61 million pounds in August. The total of 1,931 million pounds in store August 31 included 313 million pounds of butter and lard held by Government agencies mainly for future military and lend-lease requirements. Cottonseed oil stocks declined 61 million pounds in August, and there were substantial decreases in stocks of coconut and linseed oils. Increases of 21 and 19 million pounds in creamery butter and lard, respectively, were largely accounted for by Government accumulations.

WFA Purchases of Fats Relatively
Small in September

Purchases of fats and oils by the War Food Administration in the 5 weeks ended October 2 amounted to 68 million pounds compared with 47 million pounds in August and a monthly average of 175 million pounds in January-July. The September purchases consisted chiefly of 30 million pounds of vegetable oils (mostly edible linseed oil) and 29 million pounds of butter. The figure for butter is nearly 2-1/2 times as great as in April 1943, the previous peak month for butter purchases. The War Food Administration recently announced that except for butter set aside prior to October 1 no butter will be purchased by Government agencies during the October-March period, when production is seasonally low. Stocks now held by the Government are sufficient to supply military and lend-lease needs through this period.

Table 2.- Purchases of fats and oils by the War Food Administration, 1941-43.

Item	1941	1942	1943		
	Aug.	Sept.	Jan.-Sept.		
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Butter	3/	34	12	29	81
Lard and rendered pork fat ...	326	654	3	2	587
Other animal fats and oils 4/	2	30	6	4	55
Vegetable oils	---	170	25	30	485
Shortening	---	46	1	1	62
Margarine (fat content) 5/ ...	1	77	3/	1	50
Soap (fat content) 5/	---	16	3/	1	20
Total fat equivalent ...	329	1,027	47	68	1,340

Compiled from reports of the War Food Administration.

1/ 5 weeks ended October 2, 1943.

2/ Computed from unrounded numbers.

3/ Less than 500,000 pounds.

4/ Includes fish-liver and fish oils.

5/ Fat content estimated at 80 percent for margarine, 55 percent for soap.

Prices of Fats Unchanged in September

Prices of fats and oils were unchanged in September. The index number of wholesale prices of 27 major fats and oils stood at 108 percent of the 1924-29 average for the third consecutive month and was only 1 point higher than a year earlier. The effect of increases since September 1942 in prices of lard, linseed oil, cottonseed oil (prime summer yellow), and some relatively minor products, notably edible olive oil, has been approximately offset by the reduction made last June in butter prices.

Flaxseed prices declined moderately in early October, with No. 1 flaxseed at Minneapolis quoted at \$2.96-\$2.97 per bushel on October 19 compared with \$3.05 per bushel, the ceiling price, at the end of September. Demand from crushers is less urgent, as many have accumulated a sufficient reserve for capacity operations for some time ahead. No. 1 shelled Spanish peanuts, f.o.b. shipping points in the Southeastern area, were quoted as low as 13.75 cents per pound in early October compared with the ceiling price of 14.25 cents per pound, which had prevailed through most of September. Prices of Spanish peanuts also declined slightly in the Southwestern area in mid-October. These declines apparently reflected some uncertainty over the possible effects of Food Distribution Order 78 (now suspended indefinitely), which would have limited uses of shelled peanuts. The declines may also have resulted from the announcement in September of a plan to reduce retail prices of peanut butter. With demand for peanut products still unusually strong, cleaned and shelled peanuts are not likely to be quoted for long periods at prices materially below ceiling levels.

RECENT GOVERNMENT ACTIONS

Soybeans to be Crushed Under Government
Contracts; Purchase for Use as Feed
or Fertilizer Prohibited

Under Commodity Credit Corporation Order 6, effective September 17, 1943-crop soybeans may be crushed only by mills having contracts with Commodity Credit Corporation. These contracts require the mills to pay previously announced support prices to producers or to buy from country elevators which have paid such prices. The Corporation is committed to buy soybean oil and meal from contracting mills, when requested, at prices near the ceilings. The support prices to producers (which were first announced on April 8) vary according to grade and moisture content, with a basic price for No. 2 grade, 13.1 to 14 percent moisture content, of \$1.80 per bushel for green and yellow beans or \$1.60 per bushel for black, brown, or mixed. Support prices to be paid by Commodity Credit Corporation to mills for soybean oil are 1/8 cent per pound under ceiling prices. In the Midwest this would be 11-5/8 cents per pound. The support price for soybean meal, bulk, f.o.b. plant, 41 percent protein content, is \$43 per ton, except at mills in the cotton States, where it is \$48 per ton. Under a freight adjustment clause, the Corporation absorbs freight charges on soybeans shipped to contracting mills in the Pacific Coast States. Processors' margins are determined by contract provisions which require mills to sell beans for crushing to the Corporation at a fixed price, and to repurchase them at prices varying according to size of plant and type of equipment, with allowance for oil content of the beans.

Purchase of soybeans in whole or ground form for use as feed or fertilizer is prohibited by Commodity Credit Corporation Order 6. The order also forbids seed dealers and manufacturers other than processors to purchase soybeans in quantities which would result in inventories in excess of requirements up to October 11, 1944. Country shippers are forbidden to have on hand at any time after March 31, 1944, inventories in excess of quantities contracted for by eligible users, plus 2,000 bushels or a quantity equal to purchases during the 30 days immediately preceding, whichever is greater.

Cottonseed Uses and Inventories Restricted

Commodity Credit Corporation Order 7, also effective September 17, restricts uses and inventories of cottonseed. It prohibits the purchase of whole or ground cottonseed for use as feed or fertilizer. It restricts the purchase of cottonseed by seed dealers and manufacturers, including processors, to the quantities needed to meet requirements up to August 16, 1944. Inventories of ginner and handlers at any time are limited to the quantities necessary to fill contracts with eligible users, plus 30 tons or the total of purchases during the immediately preceding 30 days, whichever is greater.

Use of Fats in Manufacture of Civilian
Soap and Paints to be Increased

Food Distribution Order 42, which limits the over-all use of fats and oils, was reissued in amended form effective October 14. The principal changes are increases in the permitted consumption of fats and oils in the manufacture of soap and of paint and other protective coatings for civilian use. The permitted use of fats in the manufacture of package and bar soap (used mainly in households) is raised from 80 to 90 percent of average use in the corresponding quarters of 1940 and 1941. In the case of bulk package soap (used mainly by commercial laundries, hotels, and restaurants) the percentage is raised from 80 to 110, and for mechanics' soap it is raised from 80 to 150. Contrary to tentative plans announced by the War Food Administration in September, use of fats in soap supplied to public institutions, hospitals, and factory washrooms will not be exempted from these quotas. Use of fats and oils in the manufacture of paints, varnishes, other protective coatings, linoleum, oilcloth, felt base floor coverings, and coated fabrics will now be permitted at the rate of 60 percent of base-period use compared with 50 percent since April 1 this year. The special quota (100 percent of base-period use) established July 10 for protective coatings for metal food containers, closures, and closure liners is eliminated.

Other important changes in the amended order are as follows:

(1) Manufacturers who use 10,000 pounds or less of fats or oils in any quarter are now exempt from the order. Formerly the exemption applied only to those using 6,000 pounds or less. (2) To simplify the order, restrictions on inventories and processing have been removed. Necessary inventory limitations and special restrictions on processing will be enforced under food distribution orders for individual fats and oils. (3) The prohibition on use of certain fats and oils in nonfood products is removed. Restrictions on uses of particular fats will be effectuated through the orders especially dealing with them. (4) An exemption from the order is made for soap used in contract laundering for the armed forces and the merchant marine.

More Rosin and "Extenders" to be Required in Soap
Manufacture; Users' Inventories Restricted

Beginning November 1, soapmakers will be required to reduce the proportion of fats and oils in the manufacture of packaged soap flakes, chips, granules, and powders and bar soaps not sold in bulk. This is expected to increase production of finished soap for civilians by 9 percent. An additional increase of 19 percent in soap production is expected to result from the change in fats and oils quotas under Food Distribution Order 42. The use of extenders in soap is made mandatory under Food Distribution Order 86, issued October 18.

Under this order, an increased proportion of rosin will be used. Rosin forms soap when combined with alkalies, just as fats do, but no glycerin is

produced as a byproduct. A materially greater percentage of rosin was used in soap manufacture in the early 1930's than in recent years. Other ingredients to be used in increased proportions include scouring materials and chemicals for softening hard water or increasing the "wetting" ability of suds. The changes prescribed by the order are in terms of percentages of total weight of the finished product. According to the type of product, these changes are to be reductions of 2 to 15 percent in the content of anhydrous soap derived exclusively from fats and oils. The Office of Price Administration has amended its price controls over soaps to permit manufacturers to comply with the program as long as the serviceability of the soap products is not reduced. Food Distribution Order 86 also is designed to help prevent uneven distribution of soap supplies, through a provision prohibiting users of soap from making purchases that would increase their inventories to more than 2 cases or 45 days' supply, whichever is larger.

Restrictions on Use of Glycerin Eased

As a result of an easier supply situation in glycerin and the expectation of an increase in domestic production in the fourth quarter of the year with increased soap production, the use of glycerin in the manufacture of products for civilian consumption was permitted to expand in October. Permitted use under specific allocations to drug manufacturers was increased from 80 to 100 percent of base use (one-twelfth of 1940 use). This percentage was raised from 0 to 90 percent for cosmetic, dentifrice, and shaving cream manufacturers, and from 0 to 100 percent for manufacturers of food other than shortening and margarine. Unrestricted use was allowed in shortening and margarine, up to 1 percent and 0.06 percent, respectively, of the weight of product manufactured. Specific allocations were not required, either in October or previously, for monthly use of glycerin in these products up to 1,150 pounds or 70 percent of base use, whichever was lower.

The order controlling use of glycerin, Food Distribution Order 34, was reissued in amended form, effective October 20. The basic provisions of the original order were not changed.

Limitation on Uses of Castor Oil Removed

Restrictions under Food Distribution Order 32 on use and delivery of castor oil for the manufacture of civilian products were suspended during October, November, and December. This action was taken in Amendment 1 to the order, issued October 1. Manufacturers may use the oil for any purpose up to the limits prescribed for over-all use of fats and oils in Food Distribution Order 42. Inventories of castor oil (including dehydrated) rose from a low level of about 22 million pounds in early 1943 to about 44 million pounds on August 31. In view of improved shipping conditions, an increasing volume of castor beans and oil probably will be imported from Brazil, where supplies are plentiful. If expectations are realized, it may be possible to extend unlimited use into 1944.

Restrictions on Use of Lard Oil, Tallow Oil, and Fleshing Oils Eliminated; Control over Red Oil and Neat's-Foot Oil Extended

Lard oil, tallow oil, and fleshing oils will be free of allocation in October-December under Amendment 1 to Food Distribution Order 53, issued

October 2. An improved inventory position in these oils made the action possible. The amendment, however, limits manufacturers' and distributors' inventories. Red oil (oleic acid) and neat's-foot oil, also covered by Food Distribution Order 53, remain under allocation. The exemption for small users was changed so that it now covers only those using 450 pounds or less monthly. Formerly users of as much as 2,200 pounds of red oil or 500 pounds of neat's-foot oil monthly were exempt.

Peanut Use Limitation Order Suspended

The War Food Administration announced October 1 that the quotas under Food Distribution Order 78, which limited the use of cleaned and shelled peanuts and peanut butter, would be suspended for the period from September 1 to November 1. On October 21 the order was suspended indefinitely. A new order is being considered to require manufacturers of peanut products to report their monthly use of peanuts. These reports would furnish needed information on which quotas could later be based if necessary. Total use of farmers' stock peanuts of the 1943 crop for cleaning and shelling is limited to 1,400 million pounds under Commodity Credit Corporation Order 4 as amended on August 18.

Vegetable Oil Refiners Permitted to Sell at Tentative Prices Above Ceilings

Under Order 22 to Maximum Price Regulation 53, effective October 13, refiners of peanut and soybean oils are permitted to make bulk sales of refined oil for the manufacture of food products at tentative prices to be adjusted later to new maximum prices that may be established by the Office of Price Administration. Similar action with regard to cottonseed oil had been taken in September under Order 20 to Maximum Price Regulation 53. The Office of Price Administration is considering requests by refiners for an increase in present maximum prices. In the 1942-43 season, Commodity Credit Corporation funds were used to enable refiners to buy crude oil at 1/2 cent per pound under the ceiling prices for crude, provided the oil was for ultimate use in food products. No program of this type is contemplated for 1943-44.

Tentative Plan Announced for Reducing Retail Peanut Butter Prices

In early October the War Food Administration and the Office of Price Administration announced a tentative plan for carrying into effect the reduction in retail prices of peanut butter proposed in September. Maximum prices of peanut butter would be adjusted downward at the retail, wholesale, and manufacturers' levels, but no change would be made in the ceilings for shelled peanuts. The resulting "squeeze" between prices of the finished product and prices of the principal raw material would be offset by Commodity Credit Corporation payments to manufacturers at the rate of 4.5 cents per pound of peanut butter sold for home consumption within the continental United States. The proposed reduction in retail prices was from the July level of 33.1 cents per pound to 26.5 cents per pound as the United States average, or about 6.6 cents per pound.

Minor Adjustments Made in Maximum Prices
for Flaxseed and Linseed Oil Products

Flaxseed for medicinal purposes and for industrial uses other than crushing for oil was exempted from price ceilings by Amendment 3 to Maximum Price Regulation 397, effective September 20. In Amendment 4 to the same regulation it was provided that the maximum price for flaxseed purchased in California but grown outside the State shall be the ceiling price at the originating point plus transportation charges. This action was taken to correct a price structure under which an abnormally large share of the western Montana crop had been moving to California mills.

Amendment 7 to Maximum Price Regulation 53, effective September 11, extended to December 1 the previously announced exemptions of linseed oil shortening and hydrogenated linseed margarine oil from ceiling prices. These are new products, manufactured to meet lend-lease requirements, and no past experience exists as a basis for determining ceilings.

Under Amendment 34 to Revised Supplementary Regulation 14 to the General Maximum Price Regulation, effective October 1, maximum prices for linseed-replacement oil for use in paint were established at approximately the same levels as the ceilings for pure linseed oil. The cost of production is about the same, since the linseed oil content (approximately 70 percent) now authorized by the War Production Board must be of exceptionally high quality. The sale of 100-percent linseed oil at retail has been prohibited since late June to conserve the limited supply; the replacement oil is of about equal serviceability for paint mixing.

FACTORY PRODUCTION OF TALLOW, 1921-43

Factory Tallow Production at High Levels in
1942 and 1943, Reflecting Record
Cattle Slaughter

Factory production of inedible tallow in 1943 probably will be only slightly smaller than in 1942, the peak year to date. Factory production of edible tallow, oleostearine, and oleo oil also will be at a high level in 1943, as well as 1942, but may be slightly under the peak reached in 1926. A marked upward trend since 1921 is evident in inedible tallow production, but until 1941 output of edible tallow, oleo oil, and oleostearine showed a slight tendency to decline. Tallow production has been strongly influenced by cattle slaughter. Part of the increase in the output of inedible tallow between 1921 and 1943 was due to the increase in total live weight of cattle slaughtered under Federal inspection, and in most years during this period cattle slaughter and inedible tallow production varied in the same direction. (Figure 1.)

The division of total factory output of tallow between edible and inedible fats in 1921-43 was affected by the difference between prices of edible and inedible tallow. When the price differential in favor of edible tallow was high, output of inedible tallow tended to be small in relation to edible tallow production, and vice-versa. The increase in this price

differential in 1942 and 1943, together with the high level of cattle slaughter, largely explains the substantial increase in output of edible tallow (including oleo oil and oleostearine) in those years. It also explains why production of inedible tallow in 1942 did not increase in proportion with edible tallow, and why it declined in 1943 when edible tallow output rose slightly.

Little Change in Tallow Production
Likely in 1944

A detailed analysis of 1921-42 data indicates that the principal factors affecting factory output of both inedible and edible tallow in that period were the number and average live weight of cattle slaughtered under Federal inspection, the difference between prices of edible and inedible tallow, and trend. (Tables 3 and 4.) Prospective changes in these factors in 1944 will tend to offset each other in their effect on tallow production. Reduced feed supplies per animal unit in 1944 may result in an increase in the number of cattle slaughtered, with a decline in average live weight because of a greater proportion of grass-fed animals than in 1943. It appears impossible to predict accurately the extent of the changes in these factors, but they will tend to cancel each other as far as tallow production is concerned. On the basis of 1921-42 relationships, a reduction of about 7 pounds in average live weight would offset an increase of 500,000 in the number slaughtered. A rather small increase in inedible tallow production might be expected on the basis of the trend factor. At least partly offsetting this, however, would be an unfavorable effect, persisting into 1944, of the increase that occurred in 1943 in the difference between prices of edible and inedible tallows.

On balance, it appears that a slight increase may occur in 1944 in factory output of inedible tallow. The likelihood of an increase in production of the edible items (edible tallow, oleo oil, and oleostearine) is greater than for inedible tallow production. With a slight increase in factory production of grease also possible in 1944, the outlook points to some increase next year in total production of inedible tallow and greases. Apparent production of inedible tallow and greases is expected to amount to about 1,600 million pounds in 1943 compared with the peak of 1,741 million pounds reached in 1942.

TOTAL LIVE WEIGHT OF CATTLE SLAUGHTERED UNDER FEDERAL INSPECTION, FACTORY PRODUCTION OF TALLOW, AND DIFFERENCE BETWEEN PRICES PER POUND OF EDIBLE AND NO. 1 INEDIBLE TALLOW AT CHICAGO, 1921-43



Figure 1

Factory production of tallow is related to the number and average live weight of cattle slaughtered under Federal inspection. Output of inedible tallow has shown a marked upward trend since 1921. It also has tended to vary inversely with the price differential in favor of edible tallow. The number of cattle slaughtered is expected to increase in 1944, but the effect of this on inedible tallow production may be largely offset by a decline in average live weight and the relatively wide difference between ceiling prices of edible and inedible tallow.

Table 3.- Cattle slaughtered under Federal inspection
and factory production of tallow, 1921-43

Year	Cattle slaughtered under:			Factory production					
	Federal inspection								
	Average:								
	Number:	live weight:	Total live weight	Oleo oil	Edible animal stearine	Edible tallow	Total, edible products	Inedible tallow	All tallow
	(X ₂)	(X ₃)							(X ₁)
	Mil.	Lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1921	7.6	999	7,600	148	71	41	260	327	587
1922	8.7	981	8,521	165	75	49	289	363	652
1923	9.2	953	8,725	159	72	53	284	384	668
1924	9.6	950	9,110	156	78	52	286	388	674
1925	9.9	954	9,398	141	74	50	265	378	643
1926	10.2	964	9,815	161	79	58	298	425	723
1927	9.5	946	9,004	128	67	49	244	404	648
1928	8.5	948	8,027	124	61	41	226	392	618
1929	8.3	955	7,947	123	60	44	227	426	653
1930	8.2	956	7,810	116	56	42	214	448	662
1931	8.1	958	7,767	94	47	70	211	491	702
1932	7.6	943	7,189	75	36	53	164	480	644
1933	8.7	954	8,261	89	39	58	186	566	752
1934	9.9	928	9,229	79	34	78	191	589	780
1935	9.7	910	8,794	75	42	74	191	392	583
1936	11.0	921	10,104	98	49	98	245	481	726
1937	10.1	899	9,051	75	44	78	197	438	635
1938	9.8	921	9,004	88	46	93	227	517	744
1939	9.4	943	8,906	76	38	94	208	602	810
1940	9.8	940	9,175	69	36	79	184	712	896
1941	10.9	961	10,518	92	46	91	229	821	1,050
1942	12.3	954	11,773	106	55	112	273	920	1,193
Average:									
1921-42:	9.4	947	8,897	111	55	66	232	497	729
1943 1/2:	11.4	960	10,940	95	45	150	290	860	1,150

Correlation analysis of the relationship in 1921-42 between factory production of all tallow (X₁) and the number of cattle slaughtered under Federal inspection (X₂), average live weight (X₃), and trend (X₄) gave the following results: R_{1.234} = .96; S_{1.234} = 45 million pounds; r_{12.34} = .83; r_{13.24} = .89; r_{14.23} = .90. The estimating equation is $X_1 = -4421.25 + 65.35 X_2 + 4.57 X_3 + 18.11 X_4$. Standard errors of the regression coefficients are 10.26, .54, and 2.06, respectively. Cattle slaughtered under Federal inspection compiled from reports of the Food Distribution Administration; factory production of tallow from Bureau of the Census. 1/ Forecast.

Table 4.- Wholesale prices of oleo oil, oleostearine, edible and inedible tallow, and production of inedible tallow as a percentage of all tallow, 1921-43

Year	Price per pound					Price differ- ence between -		Year to change in X_2	Production of inedible tallow as a per- centage of all tallow X_1
	Oleo oil, extra, Chicago	Oleo- stearine, barrels, New York	Edible tallow, Chicago	Weighted average: three items $1/$	Inedible: No. 1, Chicago	Edible and in- edible tallow	Weighted average, three items and inedible: tallow (X_2)		
	Cents	Cents	Cents	Cents	Cents	Cents	Cents		Percent
1921	11.4	8.7	7.0	10.0	5.3	1.7	4.7	---	55.7
1922	10.6	9.6	7.8	9.9	6.4	1.4	3.5	- 1.2	55.7
1923	12.8	10.5	9.1	11.5	7.6	1.5	3.9	+ .4	57.5
1924	15.2	11.6	9.5	13.2	7.9	1.6	5.3	+ 1.4	57.6
1925	13.7	13.1	10.3	12.9	9.2	1.1	3.7	- 1.6	58.8
1926	12.0	12.2	9.5	11.6	8.1	1.4	3.5	- .2	58.8
1927	13.4	10.5	8.8	11.7	7.5	1.3	4.2	+ .7	62.3
1928	14.0	10.6	9.4	12.2	8.3	1.1	3.9	- .3	63.4
1929	10.9	10.5	8.9	10.4	8.0	.9	2.4	- 1.5	65.2
1930	10.5	8.9	6.8	9.4	5.6	1.2	3.8	+ 1.4	67.7
1931	6.3	7.6	4.6	6.0	3.4	1.2	2.6	- 1.2	69.9
1932	5.6	5.2	3.5	4.8	2.7	.8	2.1	- .5	74.5
1933	5.9	5.0	3.7	5.0	3.0	.7	2.0	- .1	75.3
1934	7.6	6.9	5.0	6.4	3.8	1.2	2.6	+ .6	75.5
1935	12.2	10.8	8.6	10.5	6.2	2.4	4.3	+ 1.7	67.2
1936	10.4	9.0	7.8	9.1	5.8	2.0	3.3	- 1.0	66.3
1937	12.4	9.7	8.6	10.3	7.5	1.1	2.8	- .5	69.0
1938	8.8	7.2	6.1	7.4	5.0	1.1	2.4	- .4	69.5
1939	8.0	6.8	5.5	6.7	5.1	.4	1.6	- .8	74.3
1940	7.1	6.0	4.6	5.8	4.1	.5	1.7	+ .1	79.5
1941	9.7	9.0	7.7	8.8	7.2	.5	1.6	- .1	78.2
1942	12.9	10.6	9.8	11.2	8.8	1.0	2.4	+ .8	77.1
Average:									
1922-42:	10.5	9.1	7.4	9.3	6.2	1.2	3.0	- .1	67.8
1943 $3/$:	13.0	10.5	9.9	11.0	8.4	1.5	2.6	+ .2	74.8

Correlation analysis of the relationship in 1922-42 between factory production of inedible tallow as a percentage of all tallow (X_1) and the price differential between edible and inedible tallow (X_2), year-to-year change in this differential (X_3) and trend (X_4) gave the following results: $R_{1.234} = .96$; $S_{1.234} = 2.3$ percent; $r_{12.34} = -.80$; $r_{13.24} = .68$; $r_{14.23} = .59$. The estimating equation is $X_1 = 79.20 - 5.23 X_2 + 2.79 X_3 + .43 X_4$. Standard errors of the regression coefficients are .95, .72, and .14, respectively.

Price of oleostearine compiled from Oil, Paint and Drug Reporter; all other prices, from the National Provisioner.

$1/$ Weighted by factory production shown in table 3. $2/$ Computed from data shown in table 3. $3/$ Indicated prices assume continuation of present ceilings during the remainder of 1943.

Table 5.- Factory production of fats and oils, August 1941 and 1942, June-August 1943, and indicated crop-year production for specified items, 1940-42

Item	Aug.			1943	
	1941	1942	June	July	Aug.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
<u>Animal fats and oils</u>					
Creamery butter	168.8	167.3	202.2	181.3	151.9
Inspected lard and rendered					
pork fat	98.1	106.7	191.0	200.1	165.4
Greases excluding wool grease ..	N.A.	40.1	48.4	48.1	46.6
Neat's-foot oil	"	.5	.2	.2	.2
Oleo oil	"	10.1	6.7	7.8	7.7
Stearine, animal, edible	"	5.2	2.7	3.1	3.9
Tallow, edible	"	10.8	9.8	10.1	11.5
Tallow, inedible	"	78.4	66.1	65.3	68.5
Wool grease	"	1.3	1.5	1.2	1.2
Fish-liver oil	"	.5	.9	.9	.8
Fish oil	"	27.1	11.8	13.8	23.3
Total, animal	"	448.0	541.3	531.9	481.0
<u>Vegetable oils, crude basis</u>					
Castor oil	"	10.6	11.3	5.8	10.3
Coconut oil	"	9.0	9.1	6.7	11.4
Corn oil	"	21.0	17.7	17.6	19.5
Cottonseed oil	34.1	28.2	30.4	19.8	40.0
Linseed oil	N.A.	76.3	71.3	61.0	68.0
Peanut oil	1.9	5.6	6.3	9.1	13.5
Soybean oil	N.A.	57.4	114.8	96.3	91.2
Tung oil	"	---	.3	1/	1/
Other vegetable oils	"	.8	8.7	3.2	3.5
Total, vegetable	"	208.9	269.9	219.6	257.4
Grand total	"	656.9	811.2	751.5	738.4
Indicated crop-year production					
Year					
beginning					
	1940-41	1941-42	1942-43	2/	
	Mil. lb.	Mil. lb.	Mil. lb.		
Butter, including farm	July	2,281	2,170	2,145	
Lard and rendered pork fat, total :	Oct.	2,275	2,440	2,700	
Inedible tallow and greases, total:	Oct.	1,492	1,732	1,600	
Edible tallow, oleostearine,					
oleo stock, and oleo oil	Oct.	218	277	280	
Marine animal oils	July	175	215	153	
Corn oil	Oct.	185	242	240	
Cottonseed oil	Aug.	1,425	1,250	1,400	
Linseed oil 3/	July	707	988	849	
Olive oil	Oct.	11	8	10	
Peanut oil	Oct.	174	76	130	
Soybean oil	Oct.	564	707	1,200	
Tung oil	Dec.	4	2	5	

Compiled from reports of the Bureau of the Census and the Department of Agriculture. Monthly reports do not show total production of butter, lard, inedible tallow, and greases.

1/ Included in "other vegetable oils." 2/ Based on most recent indications, subject to change. 3/ Includes production from imported flaxseed.

Table 6.- Factory and warehouse stocks of specified fats and oils, crude basis,
August 31, 1941-43, June 30 and July 31, 1943

Item	1943				
	Aug. 31, 1941	Aug. 31, 1942	June 30	July 31	Aug. 31
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
<u>Animal fats and oils</u>					
Butter	200.2	152.2	157.5	210.5	231.5
Lard and rendered pork fat	288.1	85.3	220.8	241.0	260.0
Greases, excluding wool grease ...	N.A.	102.6	78.8	97.2	98.1
Neat's-foot oil	"	2.9	2.3	2.3	2.4
Oleo oil	"	4.5	7.0	10.9	9.3
Stearine, animal, edible	"	3.2	3.6	3.8	3.2
Tallow, edible	"	12.6	17.1	16.0	14.4
Tallow, inedible	"	258.4	111.9	118.6	118.9
Wool grease	"	5.2	3.7	3.2	3.0
Cod and cod-liver oil	"	12.6	12.7	12.4	13.7
Other fish-liver oil	"	2.7	1.8	2.1	1.9
Fish oil	"	118.4	87.5	87.4	92.2
Marine mammal oil	"	44.5	56.7	54.0	41.0
Total, animal	"	805.1	761.6	859.5	889.7
<u>Vegetable oils, crude basis 1/</u>					
Babassu oil	N.A.	13.1	17.5	14.2	10.1
Castor oil 2/	"	37.3	39.8	34.7	43.8
Coconut oil	"	136.0	187.5	170.8	157.1
Corn oil	"	43.8	32.6	33.7	32.5
Cottonseed oil	274.7	259.6	299.0	244.5	183.0
Linseed oil	N.A.	230.3	191.9	189.8	177.2
Oiticica oil	"	8.7	6.4	6.2	6.5
Olive oil, edible	"	7.5	3.5	3.2	3.0
Olive oil, inedible and foots ...	"	12.3	8.6	7.7	7.2
Palm-kernel oil	"	1.6	1.2	.3	3/
Palm oil	"	97.8	77.4	75.4	75.3
Peanut oil	"	24.4	43.9	41.0	42.5
Perilla oil	"	2.9	1.1	1.0	.9
Rape oil	"	16.8	24.2	25.7	23.7
Sesame oil	"	.1	1.5	1.7	1.9
Soybean oil	"	141.0	211.6	223.2	217.0
Tung oil	"	33.5	29.0	29.6	28.2
Other vegetable oils	"	33.2	39.6	30.4	31.4
Total, vegetable	"	1,100.1	1,216.2	1,133.1	1,040.8
Grand total	"	1,905.2	1,977.8	1,992.7	1,930.6

Compiled from reports of the Bureau of the Census; except butter and lard, Food Distribution Administration. Totals computed from unrounded numbers. Includes stocks held by Government.

1/ Crude plus refined converted to crude basis by dividing by the following factors: Babassu, corn, cottonseed, palm-kernel, and palm oils 0.93; coconut, peanut, and soybean oils 0.94.

2/ Includes stocks of dehydrated castor oil converted to crude basis by dividing by 0.88.

3/ Not separately reported.

Table 7.- Prices of specified oil-bearing materials,
September 1941 and 1942, July-September 1943

Item	Unit	Sept.		1943		
		1941	1942	July	Aug.	Sept.
		Dollars	Dollars	Dollars	Dollars	Dollars
Castor beans, Brazilian, f.o.b. Brazilian ports	Long ton	1/68.00	75.00	75.00	75.00	75.00
Cottonseed, United States farm price	Short ton	49.83	45.33	44.50	50.90	51.90
Flaxseed, No. 1, Minneapolis:	Bushel	1.99	2.43	3.05	3.02	3.05
Flaxseed, United States farm price	"	1.85	2.24	2.83	2.80	2.84
Peanuts, No. 1 shelled Spanish, Southeastern shipping points	100 pounds:	7.05	11.00	14.25	14.25	14.25
Peanuts (for nuts and oil), United States farm price ..	"	4.49	5.69	7.15	7.17	7.15
Soybeans, United States farm price	Bushel	1.61	1.57	1.70	1.68	1.69

Compiled from Oil, Paint and Drug Reporter, Daily Trade Bulletin (Chicago), Chicago Journal of Commerce, Daily Market Record (Minneapolis), and reports of the Bureau of Agricultural Economics.

1/ C. and f., New York.

Table 8.- Price per ton of specified oilseed meals,
September 1941 and 1942, July-September 1943

Item 1/	Sept.		1943		
	1941	1942	July	Aug.	Sept.
	Dollars	Dollars	Dollars	Dollars	Dollars
Copra meal, Los Angeles	39.60	52.40	51.50	51.50	51.50
Cottonseed meal, 41 percent protein, Memphis	39.75	35.60	38.50	49.00	48.50
Cottonseed meal, 41 percent protein, Chicago	45.65	41.35	46.75	54.47	54.47
Linseed meal, 34 percent protein, Minneapolis	39.00	36.00	43.50	45.50	45.50
Linseed meal, 32 percent protein, New York	33.20	35.20	45.00	45.00	45.00
Peanut meal, 45 percent protein, f.o.b. Southeastern mills	38.55	36.94	38.00	53.00	53.00
Soybean meal, 41 percent protein, Chicago	41.40	43.50	40.40	51.90	51.90

Compiled from records of the Food Distribution Administration.

1/ Bagged carlots.

Table 9.- Oleomargarine: Production, withdrawals for consumption,
and materials used in manufacture, United States,
August 1941 and 1942, June-August 1943

Item	Aug.		1943 1/		
	1941	1942	June	July	Aug.
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Production:					
Colored	252	15,360	22,828	28,978	15,377
Uncolored	24,556	23,134	13,234	14,977	38,574
Total 2/	24,808	38,495	36,062	43,956	53,950
Tax-paid withdrawals for					
United States consumption 3/ ..	25,179	24,379	24,509	31,082	38,144
Materials used:					
Oleo oil	1,241	1,639	1,006	1,210	1,191
Oleostearine	162	278	193	252	272
Lard stearine	---	---	12	---	---
Lard, neutral	538	388	507	753	809
Oleo stock	132	266	197	293	315
Tallow	---	18	23	22	23
Butter	---	3	---	---	---
Monostearine	10	7	28	28	35
Total, animal	2,083	2,599	1,966	2,558	2,645
Cottonseed oil	10,131	11,312	9,736	15,051	20,650
Soybean oil	4,002	17,288	15,940	16,796	17,498
Linseed oil	---	---	3	569	2,641
Peanut oil	183	34	713	201	266
Corn oil	43	85	1,065	191	214
Cottonseed stearine	---	25	5	5	7
Soybean stearine	---	---	---	---	7
Soya flakes	---	---	4	3	6
Total domestic vegetable ..	14,359	28,744	27,466	32,816	41,289
Coconut oil	2,421	---	---	---	---
Palm oil	847	---	---	---	---
Palm-kernel oil	285	---	---	---	---
Total, foreign vegetable ..	3,553	---	---	---	---
Total, fats and oils	19,995	31,343	29,432	35,374	43,934
Milk	4,582	6,629	5,960	7,352	9,063
Salt	850	1,225	1,181	1,431	1,758
Derivative of glycerin	53	69	67	79	98
Lecithin	15	21	29	34	44
Soda (benzoate of)	11	23	25	28	34
Vitamin concentrate	3	9	7	9	11
Color	---	---	6	8	9
Miscellaneous	---	9	---	4	2
Total, other materials	5,514	7,985	7,275	8,945	11,019
Total, all materials	25,509	39,328	36,707	44,319	54,953

Compiled from Internal Revenue records and Internal Revenue Bulletin.

1/ Preliminary. 2/ Total of unrounded numbers. 3/ Excludes withdrawn free of tax for use in Federal institutions, and withdrawn for export.